Update on the Trash and Metals TMDLS for the Los Angeles River

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Global Issues

- Regional Board is proposing to implement the TMDLs through the NPDES Permit – Receiving Water Limitation provision
- Failure of our agencies to meet the TMDL requirements will expose them to Regional Board fines ($31,500 per day) and third party litigation.

"Caltrans will likely not be in full compliance with the receiving water limitation provisions of the current permit. Full compliance in the near term may not be technically or economically feasible for Caltrans or any municipality.

Letter from Maria Contreas-Sweet, Secretary of BT&H to Winston Hickox, Secretary of Cal/EPA (May 10, 2000)

Global Issues

This raises several policy questions beyond the ability of Caltrans to resolve:

- *What strategies should local and state agencies follow in achieving water quality standards, objectives and permit requirements?*
- *How can implementation of state and federal water laws avoid becoming a watershed of litigation and enforcement activity?*
- *What is the best way for Californians to pay for these water quality investments? How can these needed investments be balanced with other community needs?*

Letter from Maria Contreas-Sweet to Winston Hickox

Global Issues

- Neither EPA, State Board or Regional Board have the financial resources to complete scientifically and technically sound TMDLs, especially considering the time schedule in the Consent Decree.
- These constraints have resulted in TMDLs requiring the regulated community to fund multi-million dollar scientific studies (not really "voluntary" studies).
- The lack of sound science and engineering has created an era of uncertainty – regulated agencies are searching for the answers in a climate of fear of Regional Board enforcement action and third party litigation.

Trash TMDL – Summary Observations

- Very difficult compliance schedule for cities
- Cities will be scrambling to develop capital improvements, fund and install devices
- Compliance will be time consuming and presents unresolved issues
- 42 local agencies are regulated

Compliance Schedule

Date	Compliance Point
Sept 30, 2008	60% of baseline
Sept 30, 2009	55% of baseline
Sept 30, 2010	50% of baseline
Sept 30, 2011	40% of baseline
Sept 30, 2012	30% of baseline
Sept 30, 2013	20% of baseline
Sept 30, 2014	10% of baseline
Sept 30, 2015	3.3% of baseline
Sept 30, 2016	0% of baseline

Baseline Waste Load Allocation = Summation of: Land use areas x trash generated (by land use area)

Implementation Questions

- How does a city measure trash reductions for compliance purposes (meet the waste load allocations)?
- How best should a city prioritize in order to be cost efficient?

Trash generation by Land Uses is Imprecise

- Each city is required to collect data to establish its own generation rate, relying on a County survey
- Then each city is required to conduct a series of calculations in order to demonstrate yearly reduction of trash in the storm drain system, based on the schedule and land use data

Issues

" *The factors established by the County are based on samples taken from several land uses from different cities throughout the county. It is not known if these factors accurately reflect the actual conditions for each city. Furthermore, there are not specific guidelines as to how each city is to use these factors in determining the amount of reduction.*

There is a concern that the county's baseline data could be incorrectly estimating the trash generated in some cities. As a result, it will be even more difficult for such cities to demonstrate the required reduction, especially when there is not yet an approved process for documenting compliance."

Letter to Jonathan Bishop from the Cities of Pasadena, Glendale, Burbank and La Canada-Flintridge (February 16, 2005), Page 2

Full Capture Solves the Problem?

"*One of the goals of the BMP is to achieve compliance with the Trash TMDL without having to go through major data collection and mathematical analysis, such as using the County's trash generation figures and calculating tributary areas to the various catch basins. By using a full capture system such as proposed above, the need for such detailed data collection and analysis is eliminated."*

Ibid, Page 8

"In theory and practice, the capture will achieve a 100 percent reduction at that location and by modifying catch basins, 100 percent total citywide reduction will be achieved. By modifying 10 percent of the catch basins per year, 100 percent compliance will be achieved in 10 years."

Ibid, Page 2

Issues

- Lack of a prioritization plan for high trash generation catch basins. How do you prioritize to maximize trash capture?
- With the competing needs for municipal dollars – do we need full capture devices in all areas (i.e. single-family or litter free areas?)

Catch Basin Prioritization Plan

- Cities presented alternative to Regional Board on August 9th
- EPA Study in 2006 revealed that **13%** of the catch basins generate **50%** of the trash
- Study also revealed that **38%** of the catch basin generate **80%** of the trash.
- In theory, covering 40% of the prioritized catch basins should result in substantial reductions.

Proposed Schedule

- Six months – City's complete prioritization plan based on litter surveys and catch basin cleaning data
- Year One – Protect 15% of catch basins
- Year Two – Protect 30% of catch basins
- Year Three – Protect 50% of catch basins
- Year Four – Revise the plan and resubmit to the Regional Board

Other CBPP Items

- Develop a protocol for quantifying debris – Field maintenance crews need a simple protocol to estimate the type of debris found when clean catch basins
- Recommended a working group with the cities and the Regional Board staff

Other CBPP Items

- BMP Effectiveness
- Study the effectiveness of existing BMPs in low trash generating areas
- Work with Regional Board on appropriate study neighborhoods
- Review street sweeping, catch basin cleaning, use of partial capture devices in these neighborhoods

  The Catch Basin Prioritization Plan was not accepted by the Regional Board

Areas for Collaboration

- Development and approval of additional full capture strategies
- Development of the catch basin protocol
- How best to prioritize?
- What should we do with the TMDL “reopener”?
- What happens in a litter free areas?
- Joint Source Reduction/ Control Strategies
- Grant funding – Pilot Projects

Metals TMDL

Regulates copper, lead zinc, selenium and cadmium and

Atmospheric sources play a major role in water impairments

- Major source of copper – brake pads
- Major source of zinc – vehicle tires
- Major source of lead – historic/fuels
- Major source of selenium – marine soils

CTR Based - Major scientific question whether CTR values are overly protective of aquatic life

Metals TMDL – Summary Observations

- Compliance Schedule does not allow sufficient time to complete complex and expensive scientific studies ($4 million estimate)
- TMDL does not contain a “design storm” – agencies must design to meet CTR for all sized rain events
- Implementation Plan is due before the Regional Board considers the special studies
- Unclear how Regional Board is going to complete the atmospheric deposition study mandated by the State Board
- Interim compliance in January 11, 2011 will be very difficult to meet

Compliance Schedule

Date	Event
January 11, 2010	Special studies due
January 11, 2010	Implementation Plan due
January 11, 2011	Reopener to consider special studies
January 11, 2012	First Compliance Point (25% reduction in wet weather metal loads and 50% reduction in dry weather metal loads

Other compliance dates require additional reductions in wet and dry weather metal loads, to 100% reductions

Organizational Issues

- TMDL requires the organization of 40 cities, LA County and Caltrans
- Significant administration, engineering, scientific and funding issues
- Education and consensus building effort for a large group is time consuming and complicated

(*Imagine a dialogue with 40 city managers, 41 public works officials, 215 council members, 5 county supervisors, Caltrans District Director and Headquarters and hundreds of associated staff)*

Organizational Issues

- Who would prepare the Monitoring Plan?
- How would it be funded and implemented?
- What was the scope and costs of the scientific studies?
- How best to organize 42 agencies, with contracts, invoicing, payment of contractors, auditing, implementation and management?
- What was the most equitable funding formula?
- What would happen if some agencies did not want to participate?

Organizational Efforts

- Agencies organized prior to the TMDL adoption in early 2005
- Series of meetings with city managers. Managers requested recommendations from public works officers
- One key issue was whether the group would fund the atmospheric deposition study
- July 2006 – City Managers directed the formation of Steering and Technical Committees
- They were asked to determine the willingness of the agencies to fund and complete special studies.

Steering & Technical Committee Actions

- Steering Committee has met 11 times since July of 2006
- Technical Committee has met 16 times
- Working together, they recommended completion of 2 studies – at an estimated $4 million
- Complete survey to determine willingness of agencies to move forward and fund the studies and monitoring plan
- 40 of 42 agencies want to move forward
  - One city believes it has no benefit at all
  - One city will participate in monitoring plan only
  - Two cities have conditioned their participation on 100% participation of all agencies

Oversight Agreement

- Despite unresolved issue – agreements are moving forward
- May 2, 2007 – GCCOG Board approves oversight agreement ($340,000)
- 15 cities have signed agreements/ expected adoptions by City of LA, County and Caltrans
- Monitoring Plan has been submitted/ responding to comments
- Substantial time in logistics of monitoring ($500,000 to install auto samplers $ 350,000 in lab costs)

Other Agreements

- Monitoring Plan Agreement is being drafted
- GCCOG approval expected on November 6, 2007
- Agreements to complete the scientific studies will be necessary – once scopes and costs are determined
- Agreements to develop Implementation Plans are required.

Compliance Schedule Issues

- Wet weather studies will most likely require multiple years to be statistically valid
- Current schedule only allows for data collection in 2008-2009 rainy season (Oct 2008 to May 2009)
- Region may be headed into a prolonged draught

<u>Major Question:</u> Should the agencies proceed on $4 million in studies knowing that they could be scientifically deficient.

Areas for Collaboration

- Complete the “design storm” study
- Assist in funding a BMP pilot program – “Demonstration Neighborhood”
- Steering and Technical Committees should continue work with Regional Board on monitoring plan and special studies
- Be open to schedule needs to complete the special studies in a competent scientific manner
- Involvement environmental stakeholders in the special studies and monitoring plan